

IN THE ABSTRACT:

Please replace the original page 13 with the accompanying replacement page 13, which includes the following rewritten paragraph beginning at page 13, line 3:

1 A system for processing the measuring signals from a sensor 12,
2 ~~including consisting of~~ a first micro-controller 10 ~~having comprising~~ an input for
3 the sensor data, a first memory 18, 19 and a first processor 16, and a second
4 micro-controller 24 ~~having comprising~~ a second memory 26, 30 and a second
5 processor 27. A bus system 22 is provided that connects the first micro-controller
6 10 with the second micro-controller 24. The first memory 18, 19 stores data and
7 instructions that are configured so as to be adapted to the sensor 12 and enable
8 the conversion of the signals provided by the sensor 12 into data representing
9 the variable to be measured. The first processor 16 ~~executes is embodied in~~
10 ~~such a way that it can execute~~ the instructions stored in the first memory 18, and
11 ~~thereby convert in real time the measured signals of the sensor 12 into data that~~
12 ~~represent the measured variable, and transfers the resulting~~ transfer these data
13 by way of the bus system 22 to the second micro-controller 24. The second
14 memory 26, 30 stores sensor-independent data and instructions, which enable
15 the processing, by the second microprocessor 27, of the data transferred by the
16 bus system 22, representing the variable to be measured. ~~The second processor~~
17 ~~27 is embodied so as to be able to execute the sensor independent instructions.~~
18 ~~The invention is, for example, suitable for an electricity consumption meter where~~
19 ~~the tariff rate structure can be stored in the second memory.~~